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Cocks, Reginald Somers

Leguminosae of Louisiana

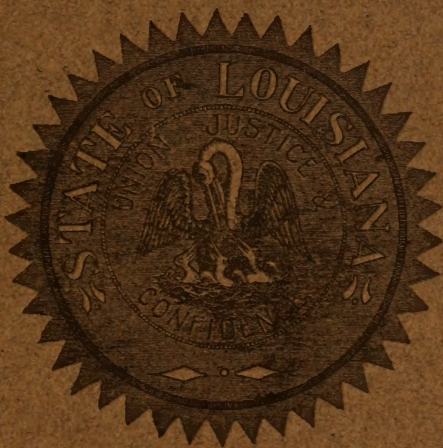
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LEGUMINOSAE OF LOUISIANA

By
REGINALD S. COCKS, M. A.

Bulletin No. 1
Natural History Survey



NEW ORLEANS, SEPTEMBER, 1910

The Louisiana State Museum

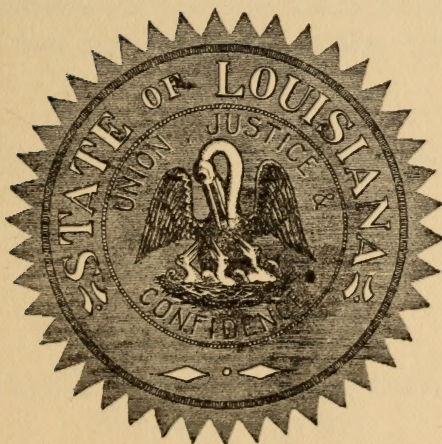
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OF LECTURE

NEW YORK, 1910

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PREFACE.

This bulletin is to be one of a series which the Board of Curators of the Louisiana State Museum propose to have published on different families of plants in Louisiana, with the view of publishing eventually a complete State Flora. They believe that such a work will be of great value, because not only has very little botanical literature dealing directly with Louisiana been published for the past fifty years, but also the State is very meagrely represented in the large herbaria of the country, and, as a consequence, the distribution and occurrence of plants in this State is very inadequately treated in all the standard manuals.

The appended catalogue is based, with a few exceptions, upon the writer's own collections made at scattered intervals during the past twelve years, this collection being now at Tulane University. The exceptions are:

First. A few plants collected between 1840 and 1860 by the pioneer collectors in Louisiana, Riddell, Hale and Carpenter. They collected at the same time, but in different parts of the State; Riddell, mostly in the vicinity of New Orleans and Southwest Louisiana; Hale, mostly in the neighborhood of Alexandria and Northern Louisiana; Carpenter, in East and West Feliciana, the eastern portions of the State. These plants are also at Tulane University, but in the absence of definite locality labels the writer has been unable to ascertain whether these species still occur where they were originally collected.

Second. Two or three plants have been included upon the authority of a catalogue of plants of Louisiana published in France, in 1887, by the Rev. A. B. Langlois, entitled "*Catalogue Provisoire de plantes phanerogames et cryptogames de la Basse, Louisiane.*" The collection upon which this catalogue is based is at the Catholic University, Washington.

Thirdly. A few plants have been included upon the authority of Small's Flora of the Southern States. These plants are presumably in the herbarium at Bronx Park. In

every case where the writer has not seen the plant, special mention has been made of the fact.

Through the courtesy of Dr. William Trelease the writer has been enabled to verify almost all identifications by comparison with authentically named species in the very extensive collection at the Shaw Herbarium in St. Louis. He is under the greatest obligation both to Dr. Trelease, Director, and Prof. M. Craig, Assistant Botanist at the Shaw Herbarium and School of Botany, for every possible assistance and courtesy.

Dr. E. L. Greene, of the Smithsonian Institution, examined the species in the genus *Baptisia*, and pronounced two of them to be undescribed. These are discussed and figured under the genus *Baptisia*.

In making this catalogue, each plant has been referred to its description in both the Southern Manuals—Chapman's *Flora of the Southern United States* and Small's *Flora of the Southern States*. If the names differ in the two manuals, both names are given, though the writer prefers to follow the nomenclature as laid down in the new *Gray's Manual*. The general range of the plant in America has been given according to the latest manuals, and, as far as possible, the range of the plant in Louisiana, though information on this point is, in many cases, incomplete. The earlier date of flowering has also been given when known. Reference is also made to a figure in Britton and Brown's *Illustrated Flora of the Northern United States* wherever the plant is included in the range of this manual, and it is surprising to note what a very large proportion of the plants of the Family Leguminosæ in Louisiana are so included. In all other cases an original illustration is given. These illustrations are of two kinds—photographic reproductions and line drawings. The photographs, with one exception, were taken by Mr. George Billings, of New Orleans, and the drawings were made by Miss Mary Frances Baker, also of New Orleans.

The author wishes to express his obligations to the Curator of the Louisiana State Museum, Mr. Robert Glenk, for services rendered in connection with the details of the publication of this bulletin.

REGINALD S. COCKS.

LEGUMINOSAE (Pulse Family).

Subfamily I. MIMOSOIDEAE.

ACACIA (Tourn.) Mill.

Acacia farnesiana (Wild.)

Opoponax

Vachelia farnesiana (L.) Wright and Arn.

Chapman Flora, p. 128; Small Flora, p. 578.

All the summer.

Distribution:—Louisiana, Southern Texas, Mexico.

Louisiana:—Forming extensive thickets in cleared but undrained swamp lands, especially in vicinity of New Orleans and the shores of Lake Pontchartrain.

DESMANTHUS Willd.

Desmanthus illinoensis (Michx.) Max M.

Desmanthus brachylobus Benth.

Acuan illinoensis (Michx.) Kuntze.

Chapman Flora, p. 128; Small Flora, p. 579; Britton and Brown Ill. Flora II, 255, figure No. 2030.

May to November.

Distribution:—Minnesota to Tennessee, Florida, Colorado and Texas.

Louisiana:—Empty lots in New Orleans, edges of ditches and swamps in vicinity of New Orleans and Shell Beach.

SCHRANKIA Willd.

Schrankia angustata T. and G.

Morongia angustata (T. and G.), Britton

Chapman Flora, p. 127; Small Flora, p. 581; Britton and Brown Ill. Flora II, 256, figure No. 2031.

June to October.

Distribution:—Virginia to Florida, Louisiana.

Louisiana:—Common over the State in dry, sandy fields.

Schrankia uncinata Willd.

Morongia uncinata (Willd.) Britton.

Chapman Flora, p. 126; Small Flora, p. 581; Britton and Brown Ill. Flora II, 256, figure No. 2031.

June to October

Distribution:—Virginia to Illinois and Nebraska, South to Florida and Texas.

Louisiana:—Dry, sandy fields over the State.

MIMOSA L. L.**Mimosa strigillosa** Torr. and Gray.

Chapman Flora, p. 126; Small Flora, p. 582.

May to November.

Distribution:—Florida to Texas.

Louisiana:—Very common on the grass levees of the Mississippi and in cultivated ground, especially near New Orleans.

NEPTUNIA Lour.**Neptunia floridana** Small.

Small Flora, p. 583.

June.

Distribution:—Florida to Louisiana.

Louisiana:—In sandy beaches; Cameron.

(This species was erroneously identified by the author in his flora of Cameron Parish as *Neptunia lutea*. *N. lutea* is included by Riddell, Hale and Carpenter in their Catalogue of Louisiana plants, but the writer has not been able to see any specimens collected by them.)

ALBIZZIA Durazz.**Albizzia julibrizzin** Durazz.

Chapman Flora, p. 127; Small Flora, p. 577.

April.

Distribution:—Virginia to Florida and Louisiana.

Louisiana:—Extensively naturalized in woods in West Feliciana.

PROSOPIS L.**Prosopis glandulosa** Torr.

Small Flora, p. 583.

April.

Distribution:—Kansas to Texas, Arizona, Mexico, Louisiana.

Louisiana:—in cultivated fields, Shreveport.

(The pods of the Louisiana specimens are extremely variable, some being markedly moniliform, others hardly constricted between the seeds. The same variation in the fruit was very noticeable in the many specimens the writer examined in the Shaw Herbarium.)

Subfamily II. CAESALPINIOIDEAE

CERCIS L.

Cercis canadensis L.

Judas tree, red bud.

Chapman Flora, p. 124; Small Flora, p. 584; Britton and Brown Ill. Flora, Vol. II, p. 257, figure No. 2033.

February and March.

Distribution:—Ontario to Minnesota, New Jersey, Florida and Texas.

Louisiana:—In rich woods, widely distributed over the State, but nowhere very abundant. In wet summers the tree often blooms again in August and September.

CASSIA (Tourn. L.

Senna.

Cassia medsgeri Shafer.

Gray New Manual p. 505.

July and August.

Distribution:—Pennsylvania to Iowa and Kansas, south to Georgia and Texas.

Louisiana:—Corners of cultivated fields; banks of rivers in most parts of the State.

(Apparently all the specimens of Hale and Carpenter in the Tulane Herbarium labeled *Cassia marylandica* and the specimens collected by the author similarly named belong to this species. According to Small, however, *C. marylandica* occurs in Louisiana in moist or alluvial soil.)

Cassia chamæcrista L.

Chapman Flora, p. 258; Britton and Brown Ill. Flora, Figure 2033.

June.

Distribution:—Massachusetts to Minnesota and south.

Louisiana:—Cultivated fields, edges of woods, all over the State.

Cassia occidentalis L.

Chapman Flora, p. 124; Small Flora, p. 587; Britton and Brown Ill. Flora II, figure No. 2038.

June.

Distribution:—Virginia and Indiana to Florida and Mexico.

Louisiana:—Common as a weed in cultivated ground.

Cassia tora L.

Small Flora, p. 586; Britton and Brown Ill. Flora II, 258, figure No. 2036.

June.

Distribution:—Virginia to Indiana, Florida and Texas.

Louisiana:—Everywhere as a weed in gardens and cultivated fields.

Cassia nictitans L.

Chamæcrista nictitans (L.) Moench.

Chapman Flora, p. 125; Small Flora, p. 588; Britton and Brown Ill. Flora II, 257, figure No. 2034.

June.

Distribution:—New England to Kansas; Georgia and Louisiana.

Louisiana:—Edges of woods, river banks throughout the State.

(The following species with which the writer is not acquainted are stated in Small's Flora to occur in Louisiana:

Chamæcrista robusta, Pollard.

Chamæcrista littoralis, Pollard.

Chamæcrista multipinnata, Pollard [Greene].)

GLEDITSIA L.

Honey Locust.

***Gleditsia triacanthos* L.**

Chapman Flora, p. 125; Small Flora, p. 589.

April.

Distribution:—Ontario to Kansas; Florida and Texas.

Louisiana:—Borders of swamps, rich woods and river bottoms throughout the State.

Gleditsia aquatica* Marsh.**Gleditsia monosperma* Walt.**

Chapman Flora, p. 125; Small Flora, p. 589.

April.

Distribution:—Indiana and Missouri to South Carolina and Florida.

Louisiana:—With the preceding, but in some places much less abundant.

(The author also includes a figure of a remarkable form, with mostly three-seeded pods, first sent to him by Mr. Donald Dickson from Shreveport. So far, only one tree has been observed.)

PARKINSONIA L.***Parkinsonia aculeata* L.**

Chapman Flora, p. 126; Small Flora, p. 590.

June.

Distribution:—Florida to Texas, California and Mexico.

Louisiana:—Escaped from cultivation, and sometimes forming dense thickets along canals near New Orleans.

Subfamily III. PAPILIONOIDEAE.

SOPHORA L.

Sophora affinis T. and G.

Small Flora, p. 595.

April.

Distribution:—Arkansas to Louisiana and Texas.

Louisiana:—Abundant on high bluffs of the Red River near Shreveport.

BAPTISIA Vent.

Baptisia tinctoria (L.) R. Br.

Wild Indigo.

Chapman Flora, p. 121; Small Flora, p. 598; Britton and Browne Ill. Flora, vol. II, p. 266, Figure 2050.

June.

Distribution:—Maine to Ontario, Minnesota, Florida, Louisiana.

Louisiana:—Dry, sandy soil, Shreveport, Ruston.

Baptisia alba (L.) R. Br.

Chapman Flora, p. 122; Small Flora, p. 600; Britton and Browne Ill. Flora, vol. II, p. 267, Figure 2053.

June.

Distribution:—Missouri to Indiana, south to Louisiana; east to North Carolina and Florida.

Louisiana:—Dry fields near Shreveport.

Baptisia leucantha T. and G.

Chapman Flora, p. 122; Small Flora, p. 600; Britton and Browne Ill. Flora, vol. II, p. 267, figure No. 2054.

May.

Distribution:—Ontario to Minnesota, Florida and Texas.

Louisiana:—Pine barrens near Covington.

Baptisia lanceolata Ell.

Chapman Flora, p. 121; Small Flora, p. 599.

June.

Distribution:—North Carolina to Florida.

Louisiana:—Dry, sandy soil; Pearl River.

Baptisia nuttalliana Small.

Baptisia confusa Pollard and Ball.

Baptisia nuculifera Greene.

Small Flora, p. 599.

April.

Distribution:—Arkansas to Louisiana, Texas and Mexico.

Louisiana:—In dry fields from Shreveport to Monroe and Alexandria, becoming a troublesome weed in pastures near Shreveport, where it chokes out other vegetation. This is the commonest and most abundant of all the Louisiana Baptisias. Dr. E. L. Greene, in Leaflets, Vol. II, page 85, May, 1910, has described it as a new species of *Baptisia nuculifera*. An examination of a number of specimens in the Shaw Herbarium at St. Louis has convinced the writer that it is identical with the *Baptisia* collected near Alexandria, Louisiana, by Pollard and Ball, and named by them *Baptisia confusa*. This is the plant described in Small's Flora as *Baptisia nuttalliana*. Taking into consideration the fact that Dr. Greene's description is based entirely on specimens with very mature fruit and no flowers, there is very little difference in the two descriptions. The two descriptions of the leaves are almost identical. The pod is described by Dr. Greene as "ligneous orbicular," by Small as "oval, firm"; by Greene as "one-half an inch long and broad, ferrugineous silky, stipe about equalling the calyx"; by Small, "1 to 1-7 c. m. long,

longstipitate pubescent." Dr. Green writes that "the plant is evidently much branched with solitary flowers in the axils of the upper leaves;" Dr. Small, that the plant is "branching with flowers in terminal racemes." Both forms of inflorescence are often found on different branches of the same plant. The same remark also applies to the description of the pod. Both of them might have added that the beak is often fully as long as the pod.

Baptisia lævicaulis (A. Gray) small.

Small Flora, p. 601.

April.

Distribution:—Louisiana and Texas.

Louisiana:—Pine barrens, Tangipahoa and St. Tammany.

Baptisia leucophœa Nutt.

Small Flora, p. 601; Britton and Browne Ill. Flora, vol. II, figure No. 2052.

April.

Distribution:—Michigan to Minnesota; Louisiana to Texas.

Louisiana:—prairies; Caddo and Calcasieu.

Baptisia australis (L.) R. Br.

This species occurs in Louisiana, according to Alphonso Wood's Class-Book, p. 302. No specimens have been seen by the writer.

Baptisia oxyphylla Greene n. sp in Mss.

Distribution:—Louisiana; Pearl River; dry, cleared soil along the railroad track.

Appended is Dr. Greene's description, Leaflet, Vol. II, p. 69, May, 1910: Main stem not known, but branches glabrous, wiry, beset closely with sessile trifoliate leaves subtended by spreading conspicuous and persistent stipules; leaflets $1\frac{1}{2}$ inches long, rhomboid, cuneately tapering from below the middle, very acute at apex and ending in an almost spinescent sharp mucro, glabrous and finely reticulate on both faces, but the margins obscurely pilose; stipules more than one-half inch long, spinescently acuminate above an ovate-lanceolate body; raceme probably solitary, large as that of **B. leucophæa**, conspicuously bracted, the bracts lance-ovate; calyx-segments exceeding the tube, triangular-subulate, very acute, piloseiliate: immature pod oval, long-pointed, pubescent.

Remarkable ally of **B. leucophæa**, found on Pearl River, south-eastern Louisiana, in October, 1910, by Mr. Reginald S. Cocks. The rhombic leaflets and large stipules are so rigid, and end so sharply, as to make the plant appear almost spinescent (page 84); also the stipules spread away almost divaricately from the stem, instead of being erect and appressed to the stem as in other stipulate species.

CROTALARIA Dill. L.

Rattle box.

Crotalaria rotundifolia (Walt) Pursh.

Crotalaria ovalis Pursh.

Chapman Flora, p. 96; Small Flora, p. 602; Britton and Browne Ill. Flora, vol. II, p. 288, Figure 2056.

April.

Distribution:—Virginia to Florida; Mississippi and Louisiana.

Louisiana:—Dry pine woods; Tangipahoa.

Crotalaria purshii D. C.

Chapman Flora, p. 96; Small Flora, p. 602.

April.

Distribution:—Georgia, Florida to Louisiana.

Louisiana:—Dry pine lands, Tangipahoa and St. Tammany.

Crotalaria sagittalis L.

Chapman Flora, p. 96; Small Flora, p. 602; Britton and Browne Ill. Flora, vol. II, p. 268, Figure 2055.

Distribution:—New England to Minnesota; Florida and Texas.

Louisiana:—Dry, sandy soil throughout the State.

LUPINUS L.**Lupinus villosus** Willd.

Chapman Flora, p. 97; Small Flora, p. 603.

May.

Distribution:—South Carolina to Florida and Louisiana.

Louisiana:—Wet pine barrens near Pearl River.

Lupinus perennis L.

Chapman Flora, p. 97; Small Flora, p. 603; Britton and Browne Ill. Flora, vol. II, p. 269, Figure 2057.

May.

Distribution:—Maine and Ontario to Minnesota; Florida and Louisiana.

Louisiana:—Dry, sandy soil, Tangipahoa.

MEDICAGO (Tourn.) L.**Medicago arabica** L.

Medicago maculata Sibth.

Britton and Browne Ill. Flora, vol. II, p. 273, Figure 2067.

Distribution:—Introduced from Europe.

Louisiana:—Not uncommon in streets and ditches and fields in New Orleans.

Medicago denticulata Willd.

Britton and Browne Ill. Flora, vol. II, p. 272, Figure 2066.

March.

Distribution:—Introduced from Europe.

Louisiana:—Streets and waste places in New Orleans.

Medicago lupulina L.

Britton and Browne Ill. Flora, vol. II, p. 272, Figure 2066

March.

Distribution:—Introduced from Europe.

Louisiana:—Streets, and along ditches near New Orleans.

Medicago sativa L.

Britton and Browne Ill. Flora, vol. II, p. 272, Figure 2064.

March.

Distribution:—Introduced from Europe.

Louisiana:—On the levees of the Mississippi River and edges of ditches near New Orleans.

MELILOTUS Juss.

Sweet Clover.

Melilotus officinalis (L.) Lam.

Britton and Browne Ill. Flora, vol. II, p. 274, Figure 2069.

February, March.

Distribution:—Introduced from Europe.

Louisiana:—Very abundant on levees of Mississippi River and edges of ditches, New Orleans.

Melilotus indica (L.) All.**Melilotus parviflora** Desf.

Chapman Flora, p. 98; Small Flora, p. 604.

February, March.

Distribution:—Introduced from Europe.

Louisiana:—In vicinity of New Orleans, with preceding, but not so common.

Melilotus alba Desf.

Britton and Browne Ill. Flora, vol. II, p. 273, Figure 2068.

May.

Distribution:—Introduced from Europe.

Louisiana:—Occurring as a weed throughout the State in cultivated ground.

TRIFOLIUM (Tourn.) L.

Clover.

Trifolium amphianthum T. and G.

Small Flora, p. 607.

March.

Distribution:—Louisiana and Texas.

Louisiana:—Prairies on Red River.

Trifolium bejariense Moric.

Small Flora, p. 606.

March.

Distribution:—Prairies; Texas and Louisiana.

Louisiana:—Prairies, Calcasieu.

Trifolium carolinianum Michx.

Chapman Flora, p. 99; Small Flora, p. 606; Britton and Browne Ill. Flora, vol. II, p. 279, Figure 2082.

March.

Distribution:—Pennsylvania to Florida and Texas.

Louisiana:—In dry, sandy soil throughout the State.

Trifolium dubium Sibth.

Britton and Browne Ill. Flora, vol. II, p. 275, Figure 2072.

March.

Distribution:—Introduced from Europe.

Louisiana:—Occasional weed in waste places, New Orleans.

Trifolium procumbens L.

Britton and Browne Ill. Flora, vol. II, p. 275, Figure 2071.

April.

Distribution:—Introduced from Europe.

Louisiana:—Throughout the State.

Trifolium pratense L.

Red clover

Britton and Browne Ill. Flora, vol. II, p. 276, Figure 2075.

March.

Distribution:—Introduced from Europe.

Louisiana:—In cultivated ground throughout the State.

Trifolium reflexum L.

Chapman Flora, p. 99; Small Flora, p. 606; Britton and Browne Ill. Flora, vol. II, p. 278, Figure 2079.

March.

Distribution:—Ontario to Nebraska; Florida and Texas.

Louisiana:—Cultivated fields and prairies; Shreveport to Lake Charles.

Trifolium repens L.

Britton and Browne Ill. Flora, vol. II, p. 279, Figure 2083.

Blooms all the year except hot summer months.

Distribution:—Introduced from Europe.

Louisiana:—In cultivated ground throughout the State.

The following two have also been reported from the State, but specimens have not been seen by the writer:

Trifolium elegans Cher.

Reported by Rev. A. B. Langlois in Catalogue provisoire de plantes de la Basse Louisiane, 1887.

Trifolium medium L.

Reported by Hale, Riddell and Carpenter, Catalogue of Plants of Louisiana, New Orleans Medical and Surgical Journal, 1859.

HOSACKIA Dougl.**Hosackia americana (Nutt) Piper.**

Lotus americanus (Nutt.) Bisch.

Hosackia purshiana Benth.

Chapman Flora, p. 98; Small Flora, p. 607; Britton and Browne Ill. Flora, vol. II, p. 280, Figure 2085.

April.

Distribution:—Minnesota to Texas; New Mexico, Louisiana.

Louisiana:—Dry, sandy soil; Alexandria.

INDIGOFERA L.

Indigo.

Indigofera tinctoria L.

Chapman Flora, p. 105; Small Flora, p. 609.

August.

Distribution:—Introduced from Asia.

Louisiana:—Occasional in waste places; formerly cultivated.

Indigofera anil L.

Chapman Flora, p. 105; Small Flora, p. 608.

September.

Distribution:—Introduced from the Tropics.

Louisiana:—Apparently naturalized in Cameron Parish near the beach; formerly cultivated.

Indigofera caroliniana Walt.

Chapman Flora, p. 105; Small Flora, p. 608.

April.

Distribution:—North Carolina to Florida and Louisiana.

Louisiana:—Dry pine lands near Alexandria.

TEPHROSIA Pers.**Tephrosia ambigua M. A. Curtis.**

Cracca ambigua (M. A. Curtis) Kuntze.

Chapman Flora, p. 104; Small Flora, p. 610.

June.

Distribution:—North Carolina to Florida and Mississippi.

Louisiana:—Dry pine lands near Covington.

Tephrosia hispida Pursh.

Cracca hispida (Michx.) Kuntze.

Chapman Flora, p. 104; Small Flora, p. 611; Britton and Browne Ill.

Flora, vol. II, p. 293, Figure 2119.

May.

Distribution:—Virginia to Florida and Louisiana.

Louisiana:—Long leaf pine barrens, St. Tammany and Tangipahoa.

Tephrosia onobrychoides Nutt.

Cracca onobrychoides (Nutt) Kuntze.

Chapman Flora, p. 104; Small Flora, p. 611.

June.

Distribution:—Arkansas and Indian Territory; Louisiana and Texas.

Louisiana:—Dry pine lands; St. Tammany and Tangipahoa.

Tephrosia spicata (Walt.) T. and G.

Cracca spicata (Walt.) Kuntze.

Chapman Flora, p. 104; Small Flora, p. 611; Britton and Browne Ill.

Flora, vol. II, p. 293, Figure 2118.

May.

Distribution:—Virginia to Tennessee; Florida and Louisiana.

Louisiana:—In pine barrens; St. Tammany; prairies, Caddo and

Calcasieu.

Tephrosia virginiana (L.) Pers.

Cracca virginiana L.

Chapman Flora, p. 104; Small Flora, p. 610; Britton and Browne Ill.

Flora, vol. II, p. 292; Figure 2117.

June.

Distribution:—Ontario to Maine, Florida; Texas.

Louisiana:—Dry, sandy soil, Tangipahoa; Caddo; probably throughout State.

Tephrosia virginiana var. *holosericea* (Nutt.) T. and G.

June.

Distribution:—Louisiana, prairies near Lake Charles.

The following additional species have also been reported from Louisiana, but not seen by the writer:

Tephrosia chrysophylla Pursh.

Reported by Rev. A. B. Langlois, Catalogue provisoire, 1887. No locality given.

Tephrosia chrysophylla var. *Chapmani*.

Reported by Riddell, Hale and Carpenter, Catalogue of Louisiana Plants, New Orleans Medical and Surgical Journal, 1859. No locality given.

Cracca floridana Vail.

Small Flora—"In pine lands."

Not seen by writer.

WISTERIA Nutt.

Wisteria macrostachya Nutt.

Bradleya macrostachya (T. and G.) Small.

Small Flora, p. 612.

Distribution:—According to Small Flora, the distribution of this species is "Missouri to Tennessee and Arkansas." The new Gray Manual seems very uncertain, and gives the distribution "Indiana to Missouri? Kansas? and Louisiana." The writer has specimens from near Selma, Ala., and from Bay St. Louis, Miss.

Louisiana:—In Louisiana it is very abundant in the southeast portion of the State, especially in the neighborhood of Covington. The writer also has specimens from Shreveport and Alexandria. All the specimens in the Tulane collection labeled "*Wisteria frutescens*" belong to this species, and it seems probable that *Frutescens* does not occur in the State.

ROBINIA L.

Locust.

***Robinia pseudacacia* L.**

Chapman Flora, p. 102; Small Flora, p. 613; Britton and Browne Ill. Flora, vol. II, p. 294, Figure 2121.

May.

Distribution:—Native from Pennsylvania to Iowa; Georgia and Indian Territory.

Louisiana:—Probably escaped from cultivation, but growing naturally throughout the State, occasionally forming dense thickets.

SESBANIA Scop.

Coffee weed.

***Sesbania macrocarpa* Muhl.**

Chapman Flora, p. 106; Small Flora, p. 614; Britton and Browne Ill. Flora, vol. II, p. 296, Figure 2124.

July to October.

Distribution:—Missouri to Texas and Florida.

Louisiana:—In moist, sandy soil and waste ground throughout the State.

GLOTTIDIUM Desv.***Glottidium vesicarium* var. *sericeum*.**

This variety of *Glottidium*, which is most abundant on the shores of Lake Charles, differs from the type in having the foliage densely silky. The writer examined a number of specimens of *Glottidium vesicarium* in the Shaw Herbarium at St. Louis, in all of which the foliage was glabrous, as described in Small's Flora.

August.

DAUBENTONIA D. C.***Daubentonia longifolia* (Cav.) D. C.**

Sesbania cavanillesii Wats.

Small Flora, p. 614.

August.

Distribution:—Florida to Texas and Mexico.

Louisiana:—Very abundant in partly drained soil in vicinity of New Orleans, where it sometimes becomes a small tree. Edges of swamps throughout the State.

ASTRAGALUS L.***Astragalus carolinianus* L.**

Astragalus canadensis L.

Chapman Flora, p. 10; Small Flora, p. 617; Britton and Browne Ill. Flora, vol. II, p. 298, Figure 2130.

April.

Distribution:—Quebec to Rocky Mountains; Georgia and Louisiana.

Louisiana:—Dry hill sides and prairies; Shreveport to Lake Charles.

Astragalus distortus T. and G.**Holocophacos distortus** (T. and G.) Rydberg.

Small Flora, p. 618; Britton and Browne Ill. Flora, vol. II, p. 303, Figure 2143.

April.

Distribution:—Iowa to West Virginia; Mississippi and Texas.

Louisiana:—Prairies near Red River; Shreveport.

Astragalus leptocarpus T. and G.**Hamosa leptocarpa** (T. and G.) Rydberg.

Reported in Catalogue of Riddell, Hale and Carpenter, New Orleans Medical and Surgical Journal, 1859. No specimens seen by the writer.

Astragalus mexicanus A. D. C.**Astragalus trichocalyx** Nutt.

Small Flora, p. 615; Britton and Browne Ill. Flora, vol. II, p. 297, Figure 2126.

April.

Distribution:—Illinois to Nebraska, Arkansas and Texas.

Louisiana:—Prairies near Natchitoches; Shreveport.

Astragalus nuttallianus var. **trichocarpus**.**Hamosa austrina**, Small.

Small Flora, p. 618.

July.

Distribution:—Louisiana to California and Mexico.

Louisiana:—Sandy beaches; Cameron Parish.

PSORALEA L.**Psoralea esculenta** Pursh.

Small Flora, p. 622; Britton and Browne Ill. Flora, vol. II, p. 284, Figure 2096.

June.

Distribution:—Northwest Territories to Montana; Wisconsin, Texas.

Louisiana:—Specimens in Tulane Herbarium collected by Riddell, 1849. No locality given except West Louisiana.

Psoralea obtusiloba T. and G.

Britton and Browne Ill. Flora, vol. II, p. 282, Figure 2089.

September.

Distribution:—Prairies, Louisiana to Arizona and Mexico.

Louisiana:—Prairies; Caddo Parish. Collected by Carpenter.

Psoralea pedunculata (Mill.) Vail.**Psoralea melilotoides** Michx.

Chapman Flora, p. 100; Small Flora, p. 623; Britton and Browne Ill. Flora, vol. II, p. 285, Figure 2099.

April.

Distribution:—North Carolina, Indiana and Kansas to Texas and Florida.

Louisiana:—In dry soil and partly cleared woods throughout State.

Psoralea rhombifolia T. and G.

Small Flora, p. 623.

July.

Distribution:—Louisiana, Texas and Mexico.

Louisiana:—Sandy beaches, Cameron.

Psoralea virgata Nutt.

Reported by Riddell, Hale and Carpenter, Catalogue of Louisiana Plants, New Orleans Medical and Surgical Journal, 1859. No specimens have been seen by the writer.

AMORPHA L.***Amorpha canescens* Pursh.**

Small Flora, p. 624; Britton and Browne Ill. Flora, vol. II, p. 287, Figure 2103.

April.

Distribution:—Indiana to Minnesota, south to Louisiana and Texas.

Louisiana:—Specimens collected by Hale. No locality given.

***Amorpha fruticosa* L.**

Chapman Flora, p. 102; Small Flora, p. 625; Britton and Browne Ill. Flora, vol. II, p. 287, Figure 2101.

June.

Distribution:—Ohio to Minnesota, south to Louisiana and Florida.

Louisiana:—Along streams throughout State.

***Amorpha paniculata* T. and G.**

Small Flora, p. 624.

July.

Distribution:—Eastern Texas and Louisiana.

Louisiana:—Salt marshes, Cameron.

The following two species are also included in the Catalogue of Riddell, Hale and Carpenter, New Orleans, 1859. No specimens have been seen by the writer:

Amorpha laevigata* Nutt.**Amorpha herbacea* Walt.****PETALOSTEMON Michx.*****Petalostemon candidus* Michx.**

Chapman Flora, p. 101; Small Flora, p. 630; Britton and Browne Ill. Flora, vol. II, p. 289, Figure 2109.

September.

Distribution:—Indiana, Minnesota, Colorado, to Texas and Louisiana.

Louisiana:—Prairies, Lake Charles.

***Petalostemon carneus* Michx.**

Included in Catalogue of Riddell, Hale and Carpenter, New Orleans Medical and Surgical Journal, 1859. No specimens have been seen by the writer.

***Petalostemon corymbosus* Michx.**

Kuhnistera pinnata (Walt.) Kuntze.

Included are authority of Rev. A. B. Langlois, Catalogue Provisoire de plantes de la Basse Louisiane, 1887. No specimens seen by the writer.

***Petalostemon emarginatus* Torr.**

Small Flora, p. 630.

September.

Distribution:—Louisiana and Texas.

Louisiana:—Sandy beaches, Cameron.

***Petalostemon gracilis* Nutt.**

Chapman Flora, p. 101; Small Flora, p. 630.

June.

Distribution:—Florida to Louisiana.

Louisiana:—Prairies, Lake Charles.

***Petalostemon violaceus* Michx.**

Petalostemon purpureus (Vent) Ryd.

Chapman Flora, p. 101; Small Flora, p. 631; Britton and Browne Ill. Flora, vol. II, p. 290, Figure 2112.

June.

Distribution:—Indiana, Colorado, Texas, Louisiana.

Louisiana:—Prairies; Caddo, Calcasieu, Cameron.

AESCHYNOMENE L.**Aeschynomene hispida** Willd.**Aeschynomene virginica** (.) B. S. P.

Chapman Flora, p. 108; Small Flora, p. 632; Britton and Browne Ill. Flora, vol. II, p. 312, Figure 2167.

May to October.

Distribution:—New Jersey, Pennsylvania, Florida and Louisiana.

Louisiana:—Along ditches and borders of swamps throughout State.

ZORNIA Gmel.**Zornia bracteata** (Walt.) Gmel.**Zornia tetraphylla** Michx.

Chapman Flora, p. 109; Small Flora, p. 633; Britton and Browne Ill. Flora, vol. II, p. 313, Figure 2169.

July.

Distribution:—Virginia, Florida, Texas and Mexico.

Louisiana:—Dry, partly cleared woods throughout State.

STYLOSANTHES Sw.**Stylosanthes biflora** B. S. P.**Stylosanthes elatior** Sw.

Chapman Flora, p. 312; Small Flora, p. 109; Britton and Browne Ill. Flora, vol. II, p. 312, Figure 2168.

April to October.

Distribution:—New York to Kansas; Florida and Texas.

Louisiana:—Dry, sandy soil throughout the State.

DESMODIUM Desv.

Beggar Lice.

Desmodium canescens (L.) D. C.**Meibomia canescens** (L.) Kuntze.

Chapman Flora, p. 111; Small Flora, p. 637; Britton and Browne Ill. Flora, vol. II, p. 317, Figure 2179.

June.

Distribution:—Canada to Minnesota; Nebraska, Florida and Texas.

Louisiana:—Edges of swamps and in cultivated ground in vicinity of New Orleans.

Desmodium dillenii Darl.**Meibomia dillenii** (Darl.) Kuntze.

Chapman Flora, p. 112; Small Flora, p. 638; Britton and Browne Ill. Flora, vol. II, p. 319, Figure 2186.

June, July.

Distribution:—Ontario, Minnesota, Florida and Texas.

Louisiana:—Specimens in Tulane Herbarium collected by Dr. Joor, 1888, with no locality other than "Louisiana."

Desmodium grandiflorum (Walt.) D. C.**Desmodium acuminatum** D. C.**Meibomia grandiflora** (Walt.) Kuntze.

Chapman Flora, p. 111; Small Flora, p. 635; Britton and Browne Ill. Flora, vol. II, p. 314, Figure 2172.

June.

Distribution:—Quebec to Minnesota; Nebraska, Florida and Texas.

Louisiana:—Rich woods, East and West Feliciana. Common.

Desmodium laevigatum (Nutt.) D. C.

Meibomia laevigata (Nutt.) Kuntze.

Chapman Flora, p. 11; Small Flora, p. 638; Britton and Browne Ill.

Flora, vol. II, p. 318, Figure 2183.

June.

Distribution:—New Jersey to Missouri; Florida to Texas.

Louisiana:—Pine woods near Alexandria.

Desmodium lineatum D. C.

Meibomia arenicola Vail.

Chapman Flora, p. 113; Small Flora, p. 636; Britton and Browne Ill.

Flora, vol. II, p. 315, Figure 2176.

September.

Distribution:—Maryland to Florida and Louisiana.

Louisiana:—Dry, sandy soil, Pearl River; Mandeville.

Desmodium bracteosum var. **longifolium** (T. and G.) Rob.

Meibomia longifolia (T. and G.) Vail.

Inserted on authority of Small Flora, p. 637.

No specimens seen by the writer.

Desmodium marylandicum (L.) Kuntze.

Meibomia marylandica (L.) Kuntze.

Chapman Flora, p. 113; Small Flora, p. 639; Britton and Browne Ill.

Flora, vol. II, p. 320, Figure 2190.

July.

Distribution:—Ontario to Massachusetts; Florida and Louisiana.

Louisiana:—Dry, open woods, St. Tammany and Tangipahoa.

Desmodium nudiflorum (L.) D. C.

Meibomia nudiflora (L.) Kuntze.

Chapman Flora, p. 111; Small Flora, p. 635; Britton and Browne Ill.

Flora, vol. II, p. 314, Figure 2170.

June.

Distribution:—Ontario to Kansas; Louisiana.

Louisiana:—Very abundant in rich woods, West Feliciana.

Desmodium obtusum (Muhl.) D. C.

Meibomia obtusa (Muhl.) Vail.

Desmodium ciliare D. C.

Chapman Flora, p. 11; Small Flora, p. 639; Britton and Browne Ill.

Flora, vol. II, p. 321, Figure 2191.

October.

Distribution:—Ontario to Michigan and Missouri; Florida and Texas.

Louisiana:—Dry, sandy fields, Pearl River.

Desmodium paniculatum (L.) D. C.

Meibomia paniculata (L.) Kuntze.

Chapman Flora, p. 11; Small Flora, p. 638; Britton and Browne Ill.

Flora, vol. II, p. 318, Figure 2182.

June.

Distribution:—Ontario to Nebraska; Florida and Louisiana.

Louisiana:—Borders of woods; Mandeville.

Desmodium pauciflorum (Nutt.) D. C.

Meibomia pauciflora (Nutt.) Kuntze.

Chapman Flora, p. 111; Small Flora, p. 635; Britton and Browne Ill.

Flora, vol. II, p. 314, Figure 2172.

June.

Distribution:—Ontario, Ohio, Arkansas, Florida, Louisiana.

Louisiana:—Rich woods, West Feliciana.

Desmodium rhombifolium (Ell.) D. C.**Meibomia Michauxii** Vail.

Chapman Flora, p. 112; Small Flora, p. 636; Britton and Browne Ill. Flora, vol. II, p. 315, Figure 2174.

September.

Distribution:—Ontario to Minnesota; Florida and Louisiana.

Louisiana:—Collected by Dr. Joor in West Feliciana.

Desmodium sessilifolium Torr and Gray.**Meibomia sessilifolia** (Torr.) Kuntze.

Chapman Flora, p. 113; Small Flora, p. 636; Britton and Browne Ill. Flora, vol. II, p. 316, Figure 2178.

October.

Distribution:—New Jersey to Missouri; Kansas, Florida and Louisiana.

Louisiana:—Dry pine woods, St. Tammany.

Desmodium tenuifolium Torr. and Gray.**Meibomia tenuifolia** (T. and G.) Kuntze.

Chapman Flora, p. 113; Small Flora, p. 637.

.....

Distribution:—North Carolina to Florida and Louisiana.

Louisiana:—Specimens in Herbarium collected by Dr. Joor. No special locality given.

Desmodium viridiflorum Beck.**Meibomia viridiflora** Kuntze.

Chapman Flora, p. 112; Small Flora, p. 638; Britton and Browne Ill. Flora, vol. II, p. 319, Figure 2185.

July.

Distribution:—New York to Michigan, Missouri, Texas and Florida.

Louisiana:—In woods near Alexandria.

The following two are also included in Riddell, Hale and Carpenter's Catalogue of Plants of Louisiana, but no specimens have been seen by the writer:

Desmodium glabellum D. C.**Desmodium bracteosum** D. C.**Desmodium rotundifolium** D. C.**Meibomia michauxii** Vail.

Chapman Flora, p. 112; Small Flora, p. 636; Britton and Brown Ill. Flora II, p. 315, Figure 2174.

September.

Distribution:—Ontario to Minnesota, Florida, Louisiana.

Louisiana:—Rich woods, West Feliciana.

Desmodium strictum D. C.**Meibomia stricta** (Pursh) Kuntze.

Chapman Flora, p. 113; Small Flora, p. 636; Britton and Brown Ill. Flora II, 316, Figure 2178.

October and November

Distribution:—New Jersey to Missouri, Florida and Kansas.

Louisiana:—Dry pine woods, Pearl River.

Desmodium rigidum D. C.**Meibomia rigida** (Ell.) Kuntze.

Included here on authority of Britton and Brown Ill. Flora II, p. 320, Figure 2189. No specimens have been seen by writer.

LESPEDEZA Michx.***Lespedeza angustifolia* (Pursh.) Ell.**

Small Flora, p. 642; Britton and Browne Ill. Flora, vol. II, p. 324,

Figure 2201.

July.

Distribution:—Massachusetts; Long Island to Florida and Louisiana.

Louisiana:—Dry, sandy soil, Tangipahoa.

***Lespedeza capitata* Michx.**

Chapman Flora, p. 110; Small Flora, p. 642; Britton and Browne Ill. Flora, vol. II, p. 324, Figure 2200.

July.

Distribution:—Ontario to Maine; Minnesota, Nebraska; Florida; Louisiana.

Louisiana:—Dry fields, West Feliciana and St. Tammany.

***Lespedeza frutescens* (L.) Britt.**

Small Flora, p. 642; Britton and Browne Ill. Flora, vol. II, p. 323, Figure 2197.

July.

Distribution:—Massachusetts, Michigan; Ontario, Florida and Texas.

Louisiana:—Dry, sandy soil; West Feliciana.

***Lespedeza procumbens* Michx.**

***Lespedeza repens* Torr. and Gray.**

Chapman Flora, p. 110; Small Flora, p. 641; Britton and Browne Ill. Flora, vol. II, p. 322, Figure 2193.

June.

Distribution:—Massachusetts to Florida and Louisiana.

Louisiana:—Dry, sandy soil; Tangipahoa.

***Lespedeza hirta* (L.) Ell.**

Chapman Flora, p. 110; Small Flora, p. 642; Britton and Browne Ill. Flora, vol. II, p. 324, Figure 2199.

June.

Distribution:—Maine, Ontario, Florida and Louisiana.

Louisiana:—Dry, sandy soil, St. Tammany and Tangipahoa.

***Lespedeza repens* (L.) Bart.**

Small Flora, p. 641; Britton and Browne Ill. Flora, vol. II, p. 321, Figure 2192.

June.

Distribution:—Long Island to Minnesota, Florida and Texas.

Louisiana:—Dry, partly cleared woods; St. Tammany.

***Lespedeza striata* (Thurnb.) H. and G.**

Japan clover

Naturalized from Eastern Asia. In cultivated fields and waste sandy soil throughout the State.

***Lespedeza violacea* (L.) Pers.**

Chapman Flora, p. 110; Small Flora, p. 641; Britton and Browne Ill. Flora, vol. II, p. 322, Figure 2195.

April.

Distribution:—New England to Florida; Minnesota, Kansas and Louisiana.

Louisiana:—Dry, sandy soil near Slidell.

***Lespedeza virginica* (L.) Britton.**

Small Flora, p. 642; Britton and Browne Ill. Flora, vol. II, p. 323, Figure 2198.

July.

Distribution:—Massachusetts to Minnesota; Florida to Texas.

Louisiana:—Dry, sandy soil, Mandeville.

RHYNCOSIA Lour.**Rhyncosia erecta** (Walt.) D. C.**Dolicholus erectus** (Walt.) Vail.

Chapman Flora, p. 115; Small Flora, p. 646; Britton and Browne Ill. Flora, vol. II, p. 337, Figure 2232.

July.

Distribution:—Delaware to Florida; west to Louisiana.

Louisiana:—Edges of swamps near New Orleans and throughout the State.

Rhyncosia latifolia Nutt.**Dolicholus latifolius** (Nutt.) Vail.

Small Flora, p. 645; Britton and Browne Ill. Flora, vol. II, p. 337, Figure 2232.

July.

Distribution:—Missouri to Louisiana and Texas.

Louisiana:—In dry, sandy soil, Ruston.

Rhyncosia minima D. C.**Dolicholus minimus** (L.) Medie.

Chapman Flora, p. 114; Small Flora, p. 644.

June to October.

Distribution:—South Carolina to Florida and Texas.

Louisiana:—Very common along the Mississippi River levees and on borders of swamps in vicinity of New Orleans.

Rhyncosia reniformis D. C.**Dolicholus simplicifolius** (Walt.) Vail.

Chapman Flora, p. 115; Small Flora, p. 646; Britton and Browne Ill. Flora, vol. II, p. 337, Figure 2233.

June.

Distribution:—Virginia to Florida and Louisiana.

Louisiana:—Dry, sandy soil, Pearl River.

Rhyncosia tomentosa (L.) H. and A.**Dolicholus tomentosus** (L.) Vail.

Small Flora, p. 645; Britton and Browne Ill. Flora, vol. II, p. 336, Figure 2230.

April.

Distribution:—Virginia to Florida and Texas.

Louisiana:—Dry, sandy soil, Alexandria.

ERYTHRINA L.**Erythrina herbacea** L.

Chapman Flora, p. 116; Small Flora, p. 647.

April.

Distribution:—North Carolina to Florida and Texas.

Louisiana:—Throughout the State in a variety of situations. Dry, sandy soil, Covington; salt marshes, Cameron; woods, West Feliciana; Ruston; Shreveport.

DIOCLEA H. B. K.**Dioclea boykinii** Gray.

Small Flora, p. 647; Chapman Flora, p. 119.

July.

Distribution:—Georgia to Arkansas and Louisiana.

Louisiana:—Banks of Red River near Shreveport.

GALACTIA P. Br.***Galactia glabella* Michx.*****Galactia regularis* (L.) B. S. P.**

Small Flora, p. 649; Britton and Browne Ill. Flora, vol. II, p. 335, Figure 2228.

April.

Distribution:—New York to Florida, Mississippi and Louisiana.

Louisiana:—Pine woods, St. Tammany.

***Galactia mollis* Michx.**

Chapman, Flora, p. 118; Small Flora, p. 650.

.....

Distribution:—North Carolina to Florida and Louisiana.

Louisiana:—Specimens found by Carpenter; no locality given.

Galactia sessiliflora* Torr. and Gray.**Galactia erecta* (Walt.) Vail.**

Chapman Flora, p. 119; Small Flora, p. 648.

April.

Distribution:—North Carolina to Florida and Alabama and Louisiana.

Louisiana:—Pine lands, St. Tammany.

Galactia volubilis* (L.) Britton.**Galactia pilosa* Ell.**

June.

Distribution:—New York to Florida and Texas.

Louisiana:—Dry, sandy soil, Mandeville.

***Galactia canescens* (Scheele) Benth.**

Reported by Riddell, Hale and Carpenter, Catalogue of Louisiana Plants, New Orleans Medical and Surgical Journal, 1859. No specimens seen by the writer.

AMPHICARPA Ell.***Amphicarpa pitcheri* Torr. and Gray.*****Falcata pitcheri* (T. and G.) Kuntze.**

Small Flora, p. 651; Britton and Browne Ill. Flora, vol. II, p. 334, Figure 2226.

July.

Distribution:—Massachusetts to New York; Louisiana and Texas.

Louisiana:—Collected by the writer near Mandeville and near Shreveport in partly cleared woods. Probably throughout the State.

Amphicarpa monoica* (L.) Ell.**Falcata comosa* (L.) Kuntze.**

Chapman Flora, p. 117; Small Flora, p. 651; Britton and Browne Ill. Flora, vol. II, p. 334, Figure 2225.

June.

Distribution:—New Brunswick to Minnesota; Florida and Louisiana.

Louisiana:—Borders of woods, Mandeville.

CLITORIA (L.)***Clitoria mariana* L.**

Chapman Flora, p. 117; Small Flora, p. 651; Britton and Browne Ill. Flora, vol. II, p. 333, Figure 2224.

May to October.

Distribution:—New York to Missouri; Florida and Texas.

Louisiana:—Open fields or partly cleared woods throughout the State.

CENTROSEMA Benth.**Centrosema virginiana** (L.) Benth.**Bradburya virginiana** (L.) Kuntze.

Chapman Flora, p. 117; Small Flora, p. 651; Britton and Browne Ill. Flora, vol. II, p. 333, Figure 2223.

June to October.

Distribution:—New Jersey to Florida; Arkansas, Louisiana and Texas.

Louisiana:—Dry pine woods throughout the State.

APIOS Moench.**Apios tuberosa** Moench.**Apios apios** (L.) MacM.

Chapman Flora, p. 115; Small Flora, p. 652; Britton and Browne Ill. Flora, vol. II, p. 335, Figure 2227.

July.

Distribution:—New Brunswick to Florida and Louisiana.

Louisiana:—In swamps and along small streams throughout State. Nowhere abundant.

PHASEOLUS L.**Phaseolus polystachyus** (L.) B. S. P.**Phaseolus pereunnis** Walt.

Chapman Flora, p. 116; Small Flora, p. 653; Britton and Browne Ill. Flora, vol. II, p. 338, Figure 2234.

July.

Distribution:—Canada to Minnesota; Florida and Louisiana.

Louisiana:—In partly cleared woods throughout State.

STROPHOSTYLES Ellis.**Strophostyles helvola** (L.) Britton.**Phaseolus helvolus** L.

Chapman Flora, p. 116; Small Flora, p. 63; Britton and Browne Ill. Flora, vol. II, p. 338, Figure 2235.

June to October.

Distribution:—Quebec to Minnesota; Massachusetts; Florida to Texas.

Louisiana:—In sand, specially abundant on the battures of the Mississippi, where it is usually erect, sometimes forming the exclusive covering of the ground; elsewhere, climbing.

Strophostyles pauciflora (Benth.) S. Wats.**Phaseolus pauciflorus** Benth.

Chapman Flora, p. 116; Small Flora, p. 63; Britton and Browne Ill. Flora, vol. II, p. 339, Figure 2237.

August.

Distribution:—Minnesota to Indiana; Nebraska, Louisiana, Texas.

Louisiana:—Banks of streams, throughout the State.

Strophostyles pauciflora var. canescens......
September.Distribution:—Louisiana: This form is very abundant in the sandy beach at Cameron, just outside tide line, twining around *Aster spinosus*, *Lycium carolinianum* and other shrubs in the drifting sands. Densely canescent, both leaves, stem and flowers.

Strophostyles umbellata* (L.) Britton.**Phaseolus umbellatus* Britton.**

Chapman Flora, p. 116; Small Flora, p. 653; Britton and Browne Ill. Flora, vol. II, p. 339, Figure 2236.

June.

Distribution:—New York to Missouri; Florida and Louisiana.

Louisiana:—Sandy soil on edges of woods throughout State.

VIGNA Savi.***Vigna luteola* Benth.*****Vigna repens* (L.) Kuntz.**

Chapman Flora, p. 116; Small Flora, p. 654.

May to October.

Distribution:—Georgia to Florida and Texas.

Louisiana:—Borders of swamps; very common in vicinity of New Orleans.

VICIA L.***Vicia caroliniana* Walt.**

Chapman Flora, p. 107; Small Flora, p. 656; Britton and Browne Ill. Flora, vol. II, p. 327, Figure 2207.

.....
Distribution:—Ontario to Minnesota; Georgia; Arkansas; Kansas; Louisiana.

Louisiana:—Collected by Hale near Alexandria.

***Vicia leavenworthii* Torr. and Gray.**

Small Flora, p. 656.

March.

Distribution:—Arkansas to Texas and Louisiana.

Louisiana:—Dry soil near Shreveport.

***Vicia ludoviciana* Nutt.**

Chapman Flora, p. 107; Small Flora, p. 657; Britton and Browne Ill. Flora, vol. II, p. 327, Figure 2209.

March.

Distribution:—Kansas, Texas, Louisiana and Florida.

Louisiana:—In cultivated soil throughout the State.

***Vicia micrantha* Nutt.**

Chapman Flora, p. 107; Small Flora, p. 657; Britton and Browne Ill. Flora, vol. II, p. 327, Figure 2208.

April.

Distribution:—Tennessee to Missouri; Alabama; Louisiana and Texas.

Louisiana:—Woods, West Feliciana. Rich lands.

***Vicia sativa* L.**

Chapman Flora, p. 107; Small Flora, p. 657; Britton and Browne Ill. Flora, vol. II, p. 328, Figure 2212.

February and March.

Distribution:—Adventive from Europe.

Louisiana:—Occurring throughout the State in cultivated fields.

The three following species are also included by Riddell, Hale and Carpenter in their Catalogue of Louisiana Plants, New Orleans Medical and Surgical Journal, 1859. No specimens have been seen by the writer:

Vicia hirsuta* L.**Vicia cracca* L.*****Vicia americana* Muhl.**

LATHYRUS L.***Lathyrus pusillus* Ell.**

Chapman Flora, p. 108; Small Flora, p. 657.

April

Distribution:—North Carolina to Florida and Texas.

Louisiana:—Sandy soil near Alexandria.

***Lathyrus venosus* Muhl.**

Chapman Flora, p. 108; Small Flora, p. 658; Britton and Browne Ill. Flora, vol. II, p. 330, Figure 2216.

April

Distribution:—Assiniboia to New Jersey; Georgia; Louisiana.

Louisiana:—Banks of streams; Shreveport.

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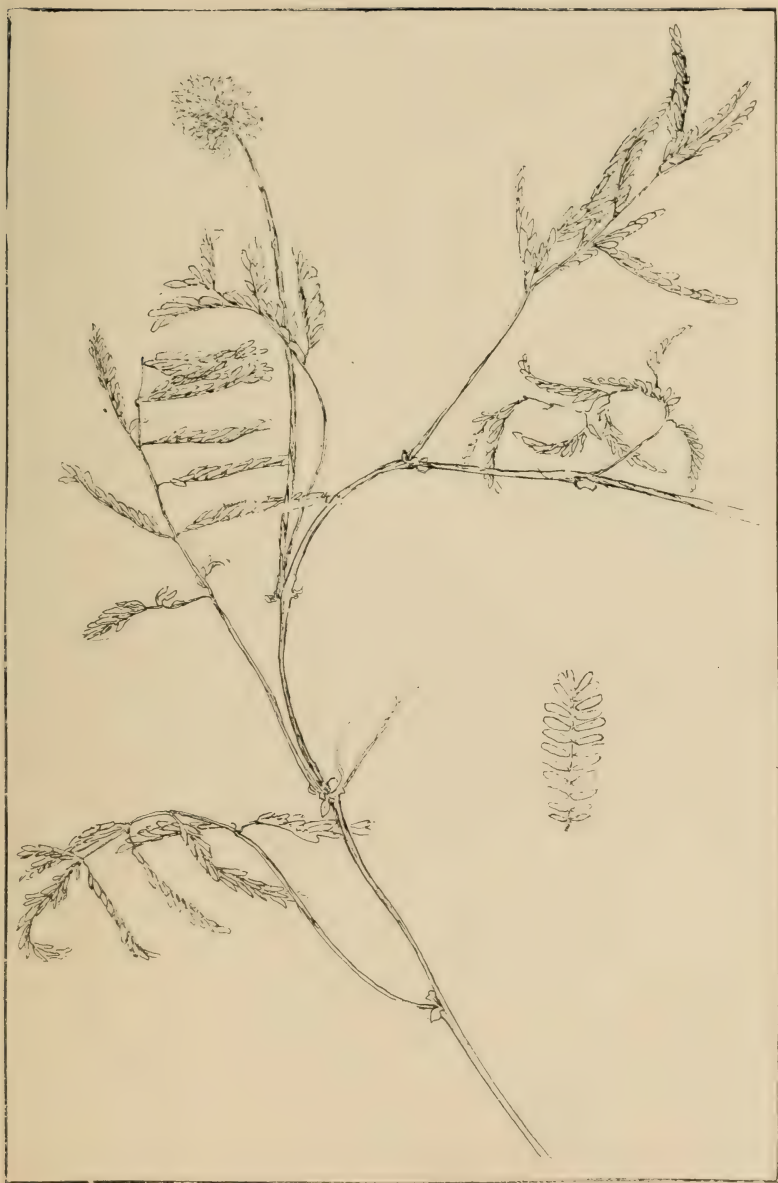
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<i>lanceolata</i>	5
<i>leucophaea</i>	6
<i>leucantha</i>	5
<i>nuttalliana</i>	5
<i>oxyphylla</i>	6
<i>tinctoria</i>	5
<i>Cassia chamaecrista</i>	3
<i>littoralis</i>	3
<i>marylandica</i>	3
<i>medsgeri</i>	3
<i>multipinnata</i>	3
<i>nictitans</i>	3
<i>occidentalis</i>	3
<i>robusta</i>	3
<i>tora</i>	3
<i>Centrosema virginiana</i>	20
<i>Cercis canadensis</i>	3
<i>Clitoria mariana</i>	19
<i>Crotalaria purshii</i>	6
<i>rotundifolia</i>	6
<i>sagitalis</i>	7
<i>Daubentonia longifolia</i>	11
<i>Desmanthus illinoensis</i>	1
<i>Desmodium bracteosum</i>	16
<i>canescens</i>	14
<i>dillenii</i>	14
<i>glabellum</i>	16
<i>grandiflorum</i>	14
<i>laevigatum</i>	15
<i>lineatum</i>	15
<i>longifolium</i>	15
<i>marylandicum</i>	15
<i>nudiflorum</i>	15
<i>obtusum</i>	15
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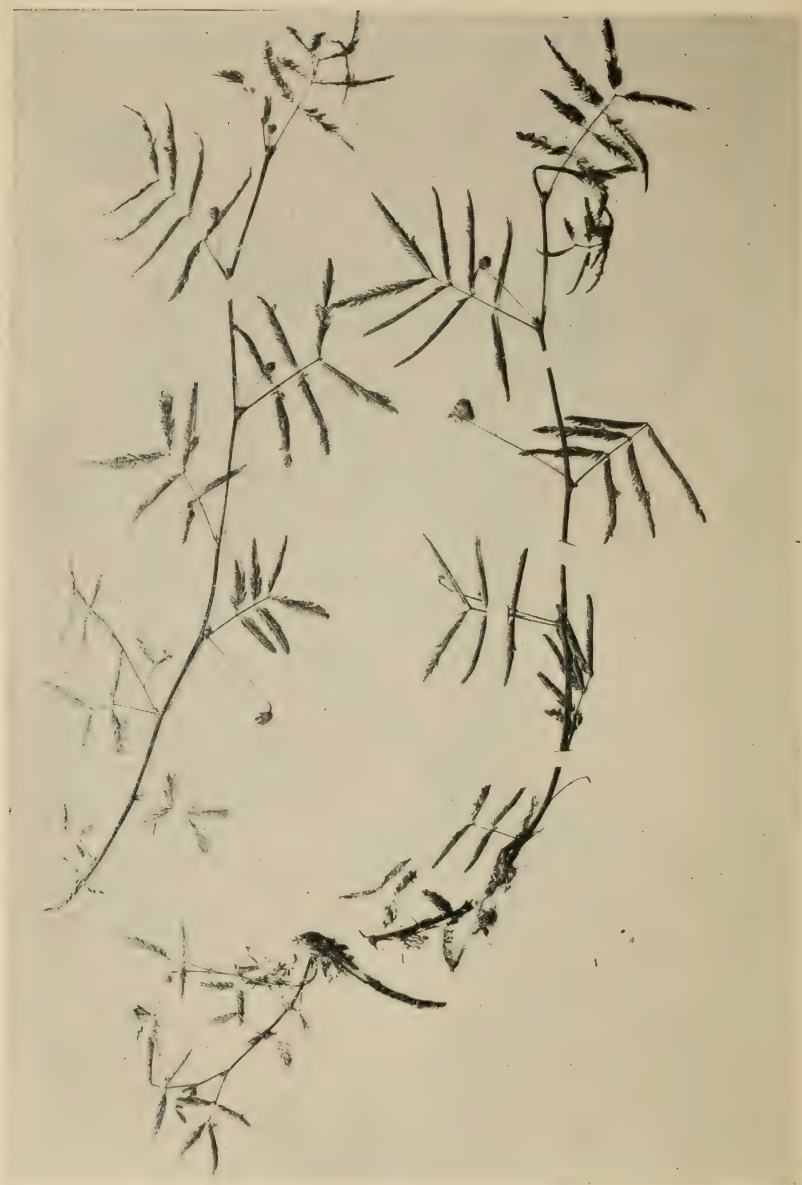
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rigidum	16
rotundifolium	16
sessilifolium	16
strictum	16
tenuifolium	16
viridiflorum	16
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repens	17
striata	17
violacea	17
virginica	17
Lupinus perennis	7
villosus	7
Medicago arabica	7
denticulata	7
lupulina	7
sativa	7
Melilotus alba	8
indica	8
officinalis	7
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Neptunia floridana	2
Parkinsonia aculeata	4
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carneus	13
corymbosus	13
emarginatus	13
gracilis	13
violaceus	13
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<i>Schrankia angustata</i>	1
<i>uncinata</i>	1
<i>Sophora affinis</i>	5
<i>Strophostyles helvola</i>	20
<i>pauciflora</i>	20
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Mimosa strigillosa.



Neptunia floridana.



Cassia medsgeri.



Gleditsia triacanthos.

Gleditsia new spec.

Gleditsia aquatica.



Sophora affinis.



Baptisia nuttalliana.



Baptisia laevicaulis.



Baptisia oxyphylla.

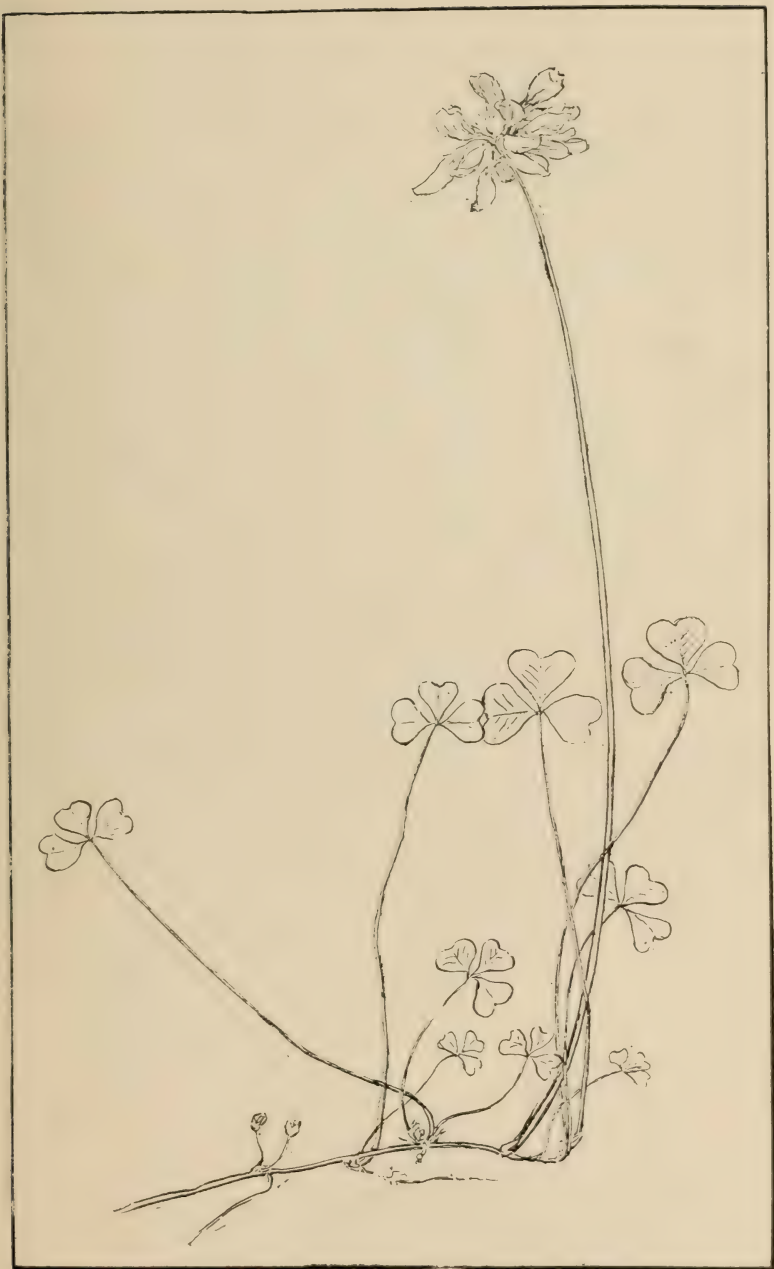


Crotalaria purshii.



Lupinus villosus L.
Lup. L.

Lupinus villosus.



Trifolium amphianthum.



Trifolium bejariense.



Indigofera anil.



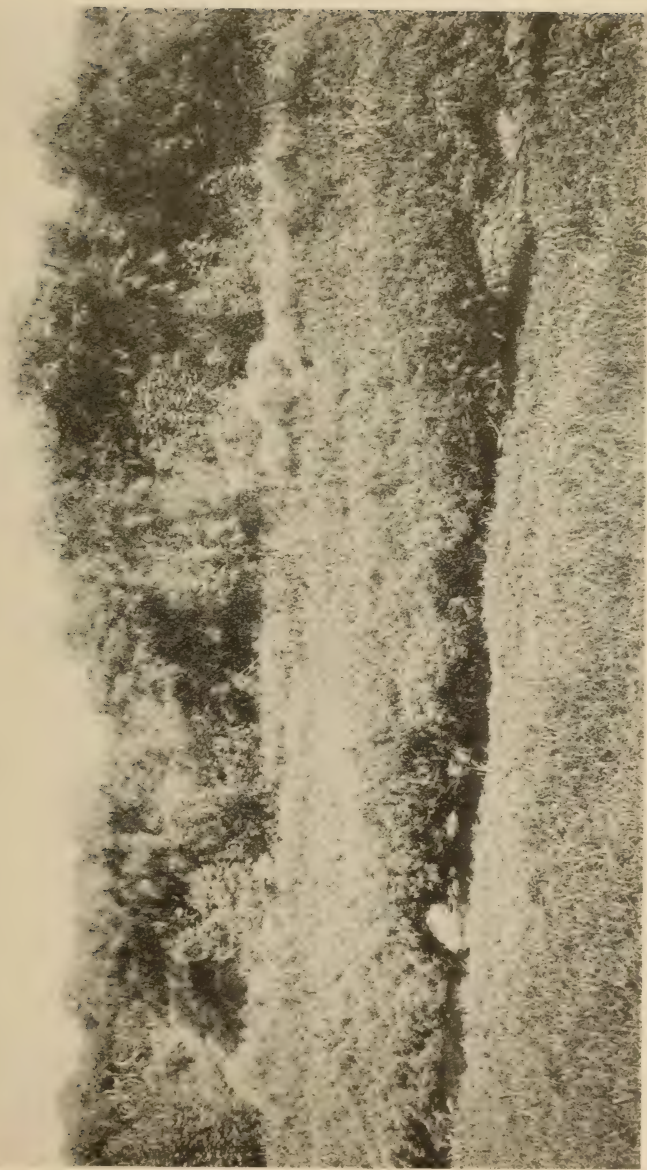
Indigofera caroliniana.



Tephrosia onobrychoides.



Thickets of *acacia farnesiana*.



Thickets of *Parkinsonia aculeata*.



Petalostemon gracilis.



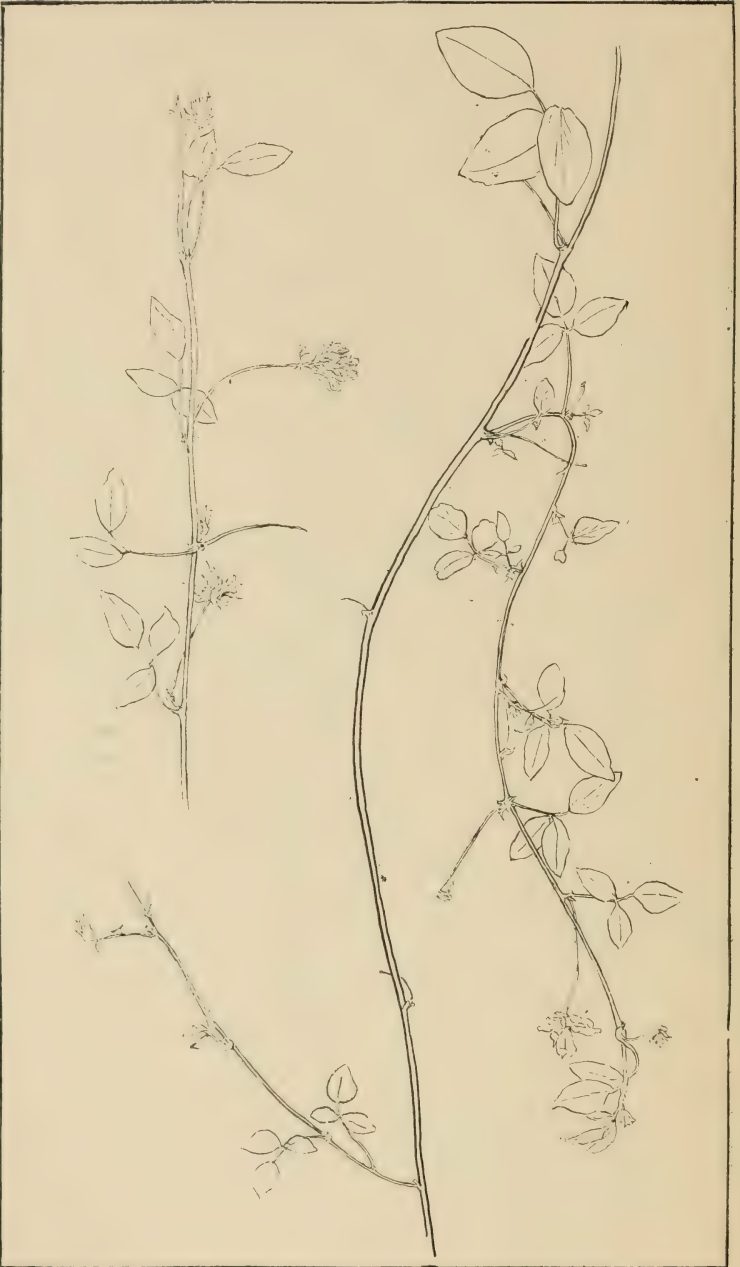
Wisteria macrostachya.



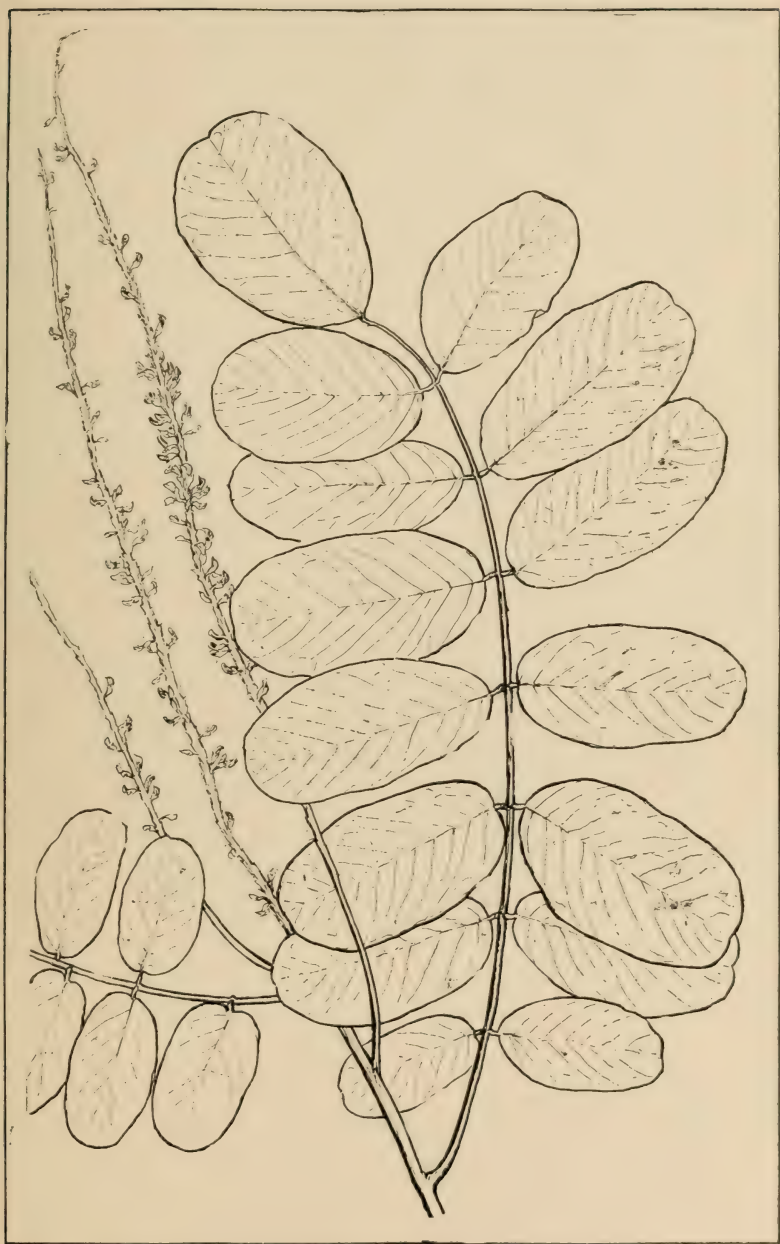
Glottidium vesicarium var. *sericeum*.



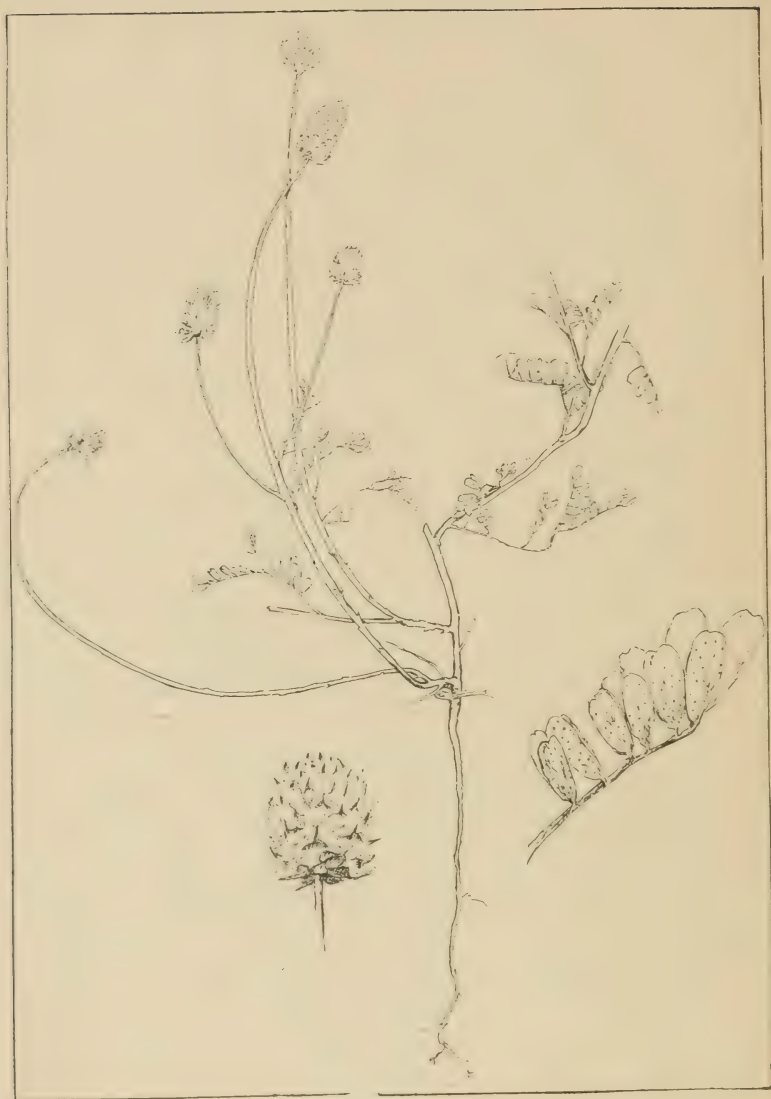
Astragalus nuttallianus var. *trichocarpus*.



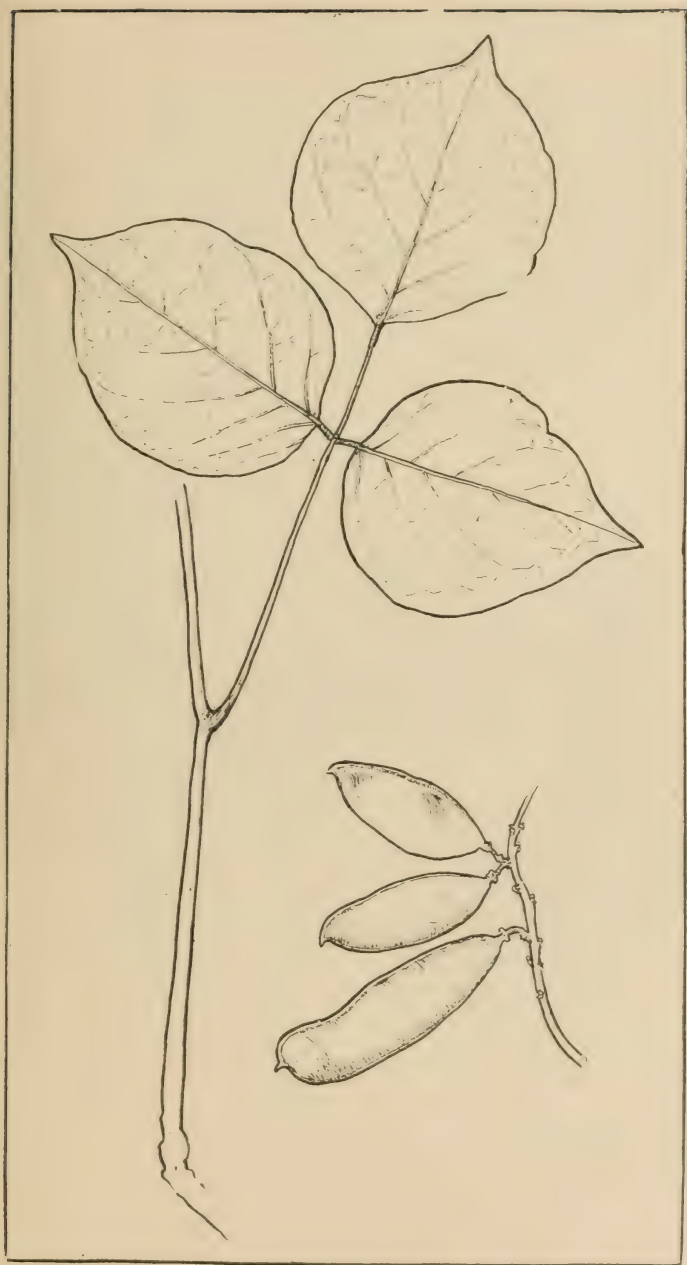
Psoralea rhombifolia.



Amorpha paniculata.



Petalostemon emarginatus.



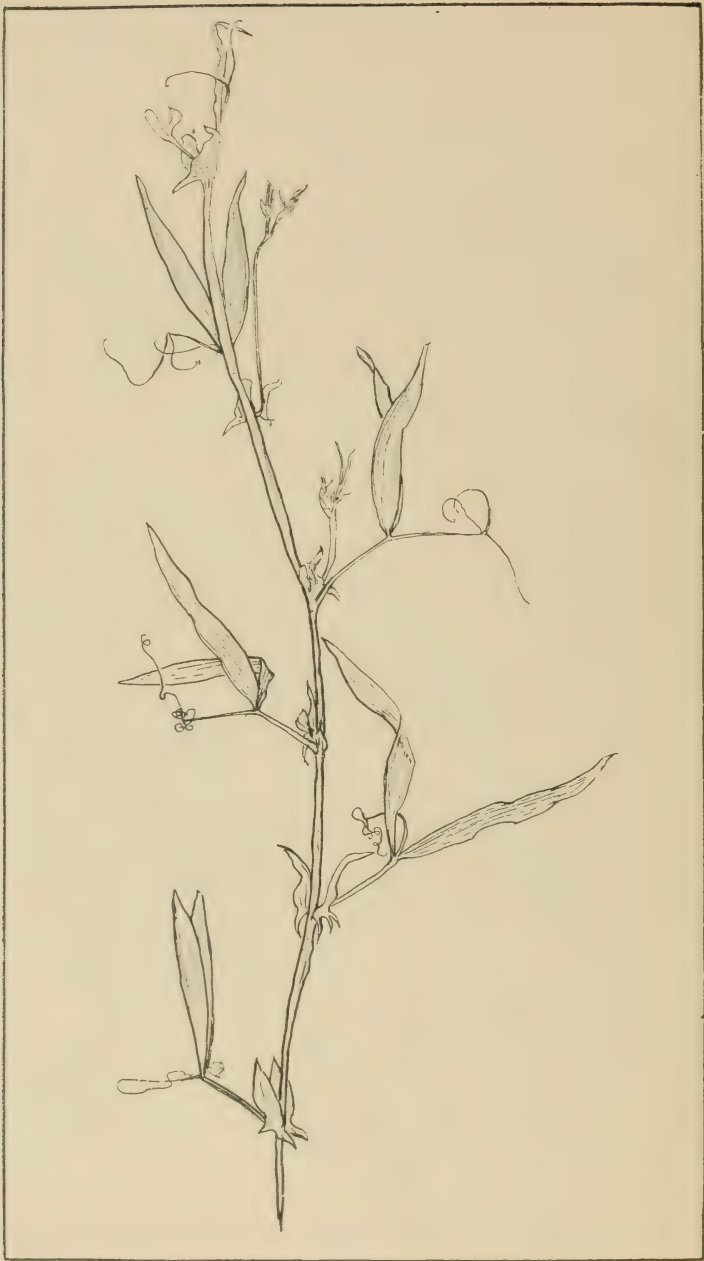
Dioclea boykimmii.



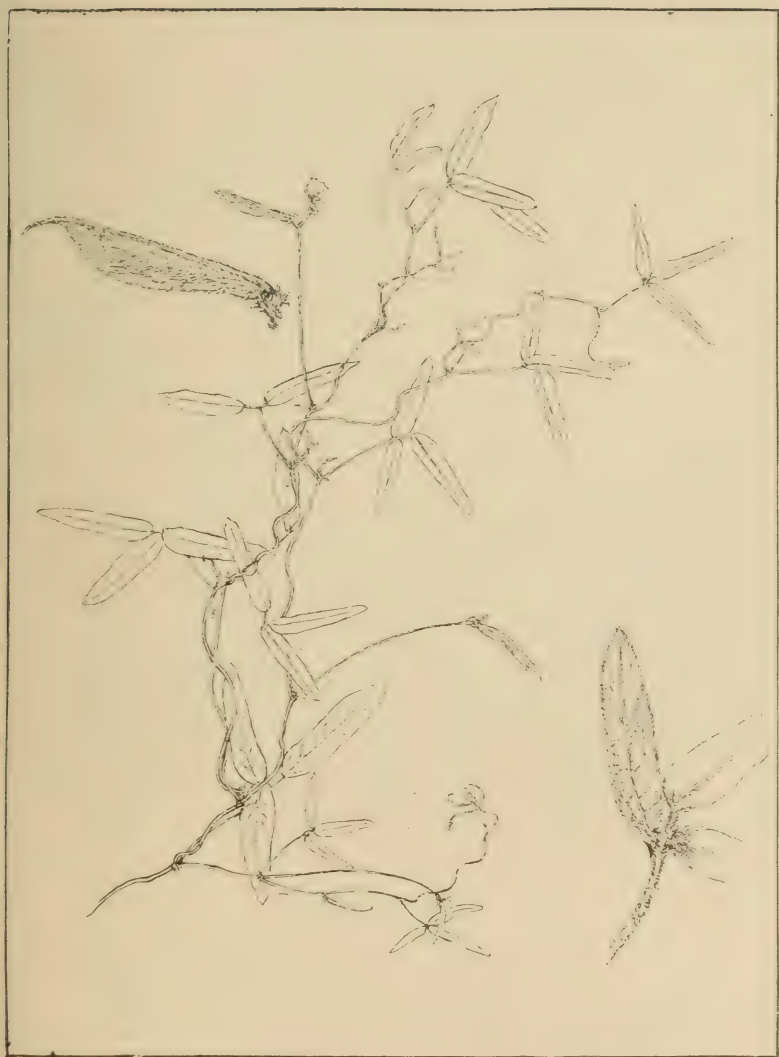
Galactia sessiliflora.



Vigna luteola.



Lathyrus pusillus.



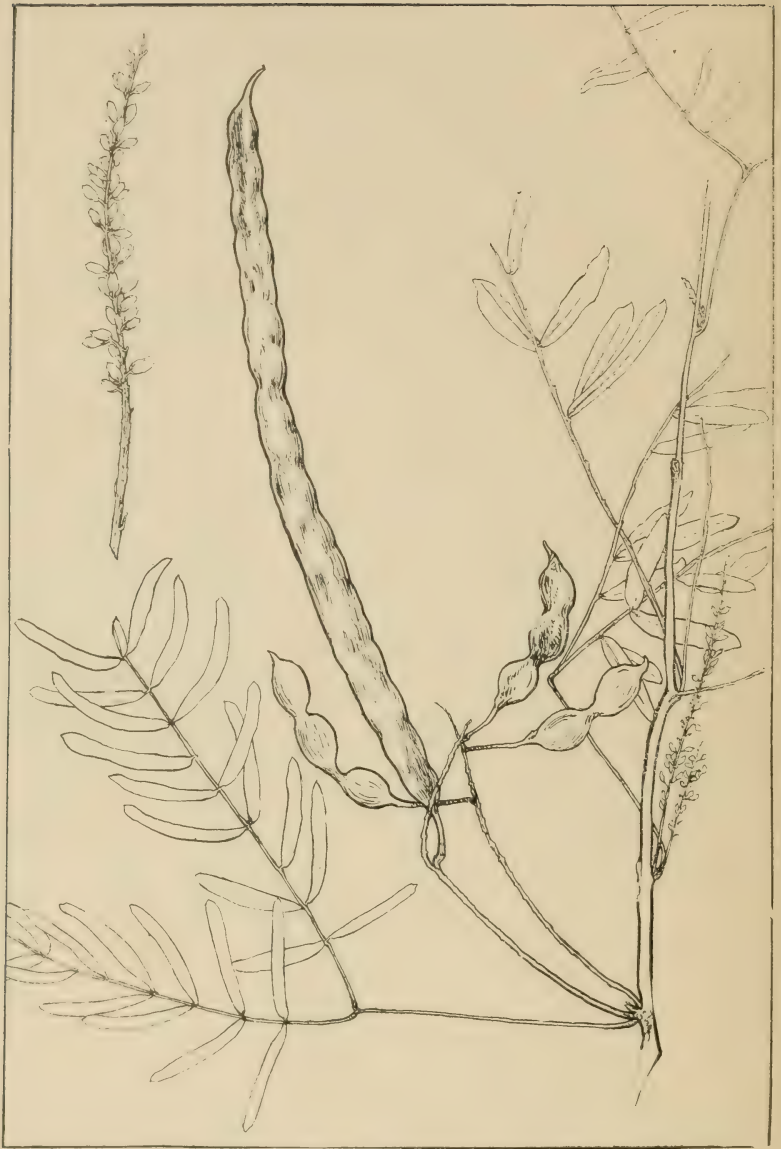
Phaseolus pauciflorus var. *canescens*.



Daubentonia longifolia.



Prosopis glandulosa, flowers.



Prosopis glandulosa, fruit.



Erythrina herbacea.



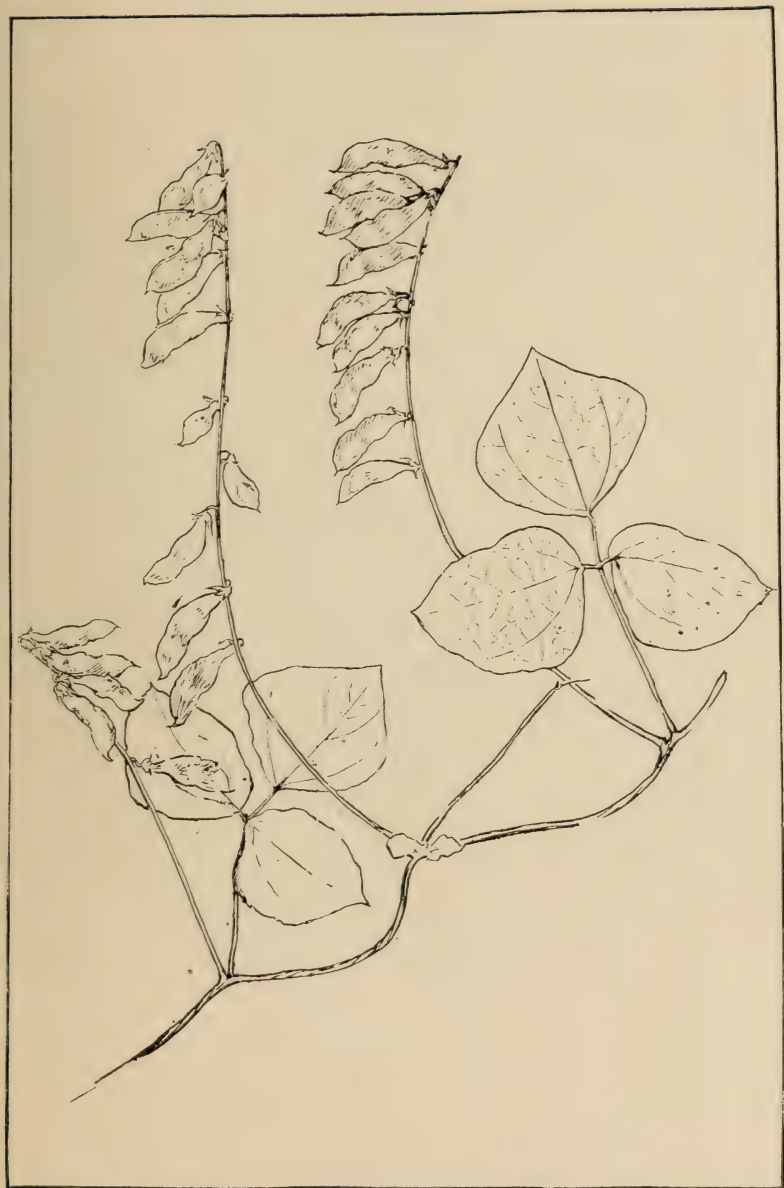
Desmodium dillenii.



Tephrosia hispidula.



Galactia mollis.

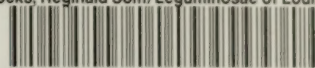


Rhynchospora minima.



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